Development of Emotional EEG Database

Emotion Elicitation Protocol
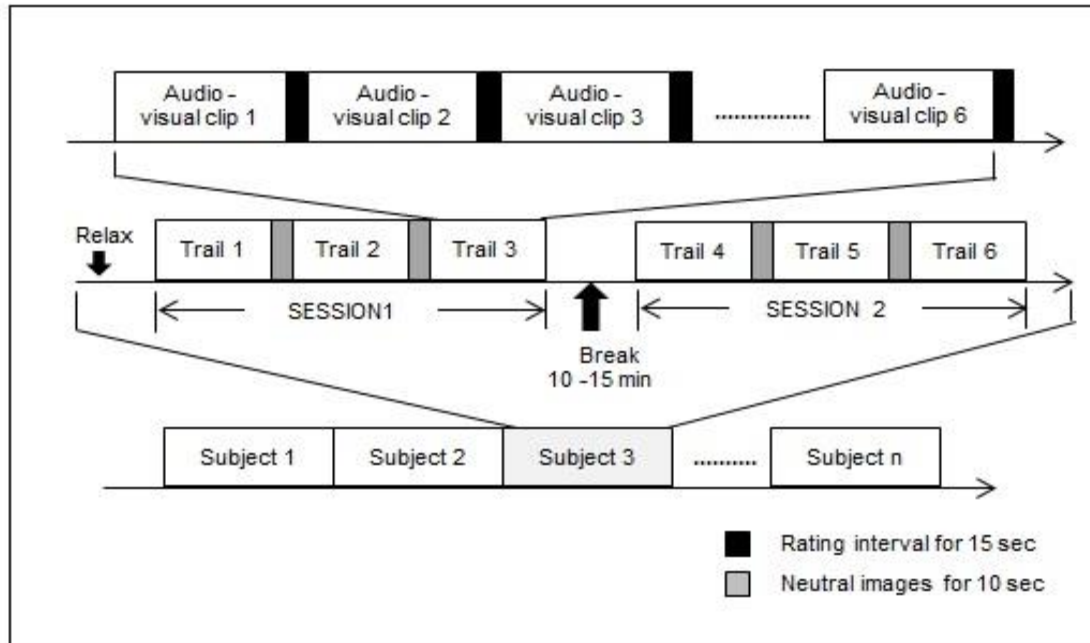

Fig 5. Emotion Elicitation Protocol

Entity	Time duration
Emotional stimulus	36-45 sec
Trial	4-5 min
Session	25-30 min
Protocol	1.15 – 1.30 hours
Rating	15 sec
Break	10-15 sec

TABLE 3: Time duration details

Trial	Emotion Stimulus 1	Emotion Stimulus 2	Emotion Stimulus 3	Emotion stimulus 4	Emotion Stimulus 5	Emotion Stimulus 6
1,4	Anger	Happiness	Disgust	Sadness	Fear	Surprise
2,5	Disgust	Anger	Sadness	Surprise	Fear	Happiness
3,6	Sadness	Surprise	Happiness	Fear	Anger	Disgust

TABLE 4: Order of video clips in data acquisition protocol

Note: Rest sate EEG (eyes-opened) data was obtained when the participants relaxed before the start of the experiment.

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Data Acquisition device and electrode placement

	Emotiv headset
Number of channels	14 plus (CMS/DRL references, P3/P4 locations)
Connectivity	Proprietary Wireless, 2.4 Hz band
Electrodes	Ag/Agcl
Channel names	AF3, F7, F3, FC5, T7, P7, O1, O2, P8, T8, FC6, F4, F8, AF4
Sampling rate	128 SPS (samples per second)

TABLE 5: Data Acquisition device details

Fig 6. Electrode placement

Fig 7. Emotiv EPOC headset on a participant showing right, back and left views
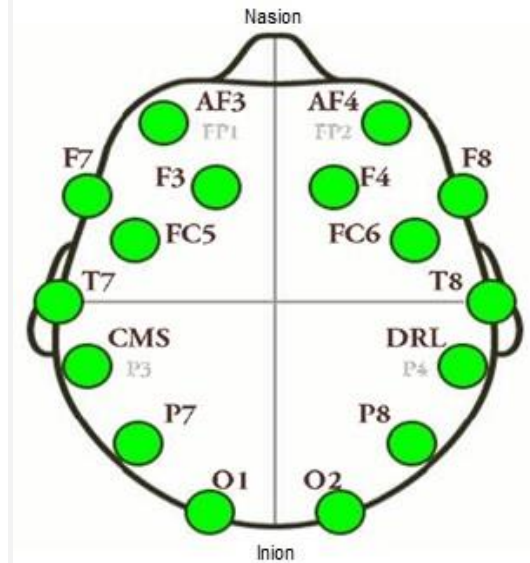
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Participants

- **Twenty Idiopathic Parkinson's disease** (10 men and 10 women)and **20 healthy** age- (ages of 45-65 years), education-, and gender-matched controls (9 men and 11 women) participated in this study.

- The **PD patients recruited** from the clinic **Neurology out patient service** of the **Hospital University Kebangsaan Malaysia (HUKM) medical center** in Kuala Lumpur, Malaysia.

- The **HC participants** were recruited through the **hospitals medical unit** community and/or from **patients relatives.**

- All PD patients were **optimally medicated (ON state)** during the testing session.

- All participants were **right-handed** as determined by self-report and confirmed by Edinburg Handedness Inventory (Score: 1-10)